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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-30. (CANCELED)

31. (PREVIOUSLY PRESENTED) The method of claim 48 wherein B^1 and B^2 are the same or different C-or O-monosaccharides and glycosides selected from the group consisting of glucose, mannose, fucose, galactose, glucosamine, mannosamine, galactosamine, and sialic acid, oligosaccharides containing 1 to 10 furanose or pyranose units, amino acids, peptides containing 1 to 20 amino acid residues, flavonoids and isoflavonones C- or O- glucosides selected from the group consisting of rutin, neohesperidin dihydrochalone, phloridizin, hesperidin, hesperidin methyl chalcone, naringenin, and esculin, carminic acids selected from the group consisting of carmine, and 18b-glycyrrhetinic acid.

32-34. (CANCELED)

35. (PREVIOUSLY PRESENTED) The method of claim 48 wherein B^1 and B^2 are the same or different and are selected from the group consisting of glucose, galactose, fucose, sialic acid and carminic acid.

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36. (PREVIOUSLY PRESENTED) The method of claim 48 wherein L^1 and L^2 are the same or different and is polyethylene glycol having a molecular weight in the range of 1,000 to 4,000.

37-41. (CANCELED)

42. (CURRENTLY AMENDED) The method of claim 48 wherein said effector molecule ~~is an optical agent selected from the group consisting of a fluorophore that absorbs light in the range of 300 - 1200 nm, and a chromophore that absorbs light in the range of 300 - 1200 nm molecule~~ is at least one of an echogenic agent selected from the group consisting of perfluoropropane, perfluorobutane, sulfur hexafluoride, tetrafluoromethane, hexafluoroethane, octafluoropropane, decafluorobutane, dodecafluoropentane, and perfluorohexane; a radionuclide selected from the group consisting of I-123, I-131, Tc-99m, Re-186, Re-188, SM-152, Ho-155, Bi-202, and Lu-157; a paramagnetic agent selected from the group consisting of Gd-DTPA, Gd-DOTA, Gd-DTPA-*bis*(methoxyethyl)amide, and Mn-EDTA; a cytotoxic agent selected from the group consisting of fluorouracil, fluorouridine, sulfisoxazole, N'-(w-thiazolyl)sulfanilamide, sulfmethoxazole, and sulfisomidine; and an optical agent selected from the group consisting of fluorescein and indocyanine green.

43-44. (CANCELED)

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45. (PREVIOUSLY PRESENTED) The method of claim 48 wherein said effector molecule is perfluorobutane.

46. (PREVIOUSLY PRESENTED) The method of claim 48 wherein said effector molecule is I-131 or Tc-99m.

47. (PREVIOUSLY PRESENTED) The method of claim 48 wherein said target is selected from the group consisting of tumor cells, thrombi, monocytes, macrophages, eosinophils, neutrophils, lymphocytes, vascular endothelium, myocardial cells, hepatocytes, and an extracellular matrix surrounding any of the said cells.

48. (CURRENTLY AMENDED) A method of targeting an effector molecule to a target site in a patient, said method comprising

providing to said patient an effective amount of a physiologically acceptable composition comprising an organized mobile multicomponent conjugate (OMMC) assembly comprising a lamellar structure selected from at least one of salts of docosanoic acid, or salts of octacosanoic acid;

said lamellar structure defining a void and having incorporated at least two binding compounds B^1 and B^2 independently selected from at least one of amino acids, peptides (1-20 amino acids), peptidomimics, monosaccharides, oligosaccharides (1-10), glycomimics, glycopeptides; anionic compounds; C- or O-monosaccharides and glycosides; flavonoids, isoflavonones; or C- or O- glucosides;

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B^1 bound to said structure by anchor region A^1 and B^1 and A^1 linked via linker L^1 wherein A^1 is a succinic acid ester of a PEG[50]stearate L^1 and B^2 bound to said structure by anchor region A^2 and B^2 and A^2 linked via linker L^2 wherein A^2 is a fucosuccinamide ester of a PEG[50] stearate L^2, and

an effector molecule selected from the group consisting of ~~that is~~ an optical agent selected from the group consisting of a fluorophore that absorbs light in the range of 300 - 1200 nm, and a chromophore that absorbs light in the range of 300 - 1200 nm ~~at least one of an echogenic agent selected from the group consisting of perfluoropropane, perfluorobutane, sulfur hexafluoride, tetrafluoromethane, hexafluoroethane, octafluoropropane, decafluorobutane, dodecafluoropentane, and perfluorohexane; a radionuclide selected from the group consisting of I-123, I-131, Tc-99m, Re-186, Re-188, SM-152, Ho-155, Bi-202, and Lu-157; a paramagnetic agent selected from the group consisting of Gd-DTPA, Gd-DOTA, Gd-DTPA-bis(methoxyethyl)amide, and Mn-EDTA; a cytotoxic agent selected from the group consisting of fluorouracil, fluorouridine, sulfisoxazole, N'-(w-thiazolyl)sulfanilamide, sulfmethoxazole, and sulfisomidine; an optical agent selected from the group consisting of fluorescein and indocyanine green~~,

said B^1 and B^2 binding to at least first and second affinity sites in said target site, wherein a position of B^1 and B^2 relatively self-adjust to form an OMMC ensemble resulting in cooperative binding of B^1 and B^2 to said affinity sites, wherein said effector molecule is provided to the target site.

49. (CANCELED)

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50. (PREVIOUSLY PRESENTED) The method of claim 48 wherein said effector molecule is selected from the group consisting of a fluorocarbon gas, a fluorocarbon liquid, and a fluorophore.

51. (CANCELED)

52. (PREVIOUSLY PRESENTED) The method of claim 48 wherein B^1 is at least one saccharide and B^2 is at least one anionic component.

53. (PREVIOUSLY PRESENTED) The method of claim 48 wherein B^2 is selected from the group consisting of a carboxylate, a sulfate, and combinations thereof.

54. (CANCELED)

55-57. (CANCELED)

58. (PREVIOUSLY PRESENTED) The method of claim 48 wherein B^1 is selected from the group consisting of a -C- or an -O- saccharide, a saccharosamine, sialic acid, lactose, sucrose, maltose, and salts thereof, and B^2 is selected from the group consisting of $-(CH_2)_d-CO_2^-$, $-(CH_2)_d-SO_3^-$, $-(CH_2)_d-OSO_3^-$ and $-(CH_2)_d-OPO_3^{-2}$ wherein d=1-10; $-ArylSO_3^-$; DTPA, EDTA, DOTA, EGTA, amino acids, succinic acid, maleic acid, polypeptides, and salts thereof.

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59. (PREVIOUSLY PRESENTED) The method of claim 58 wherein the -C- or -O-saccharide is selected from the group consisting of glucose, mannose, fucose, and galactose.

60. (PREVIOUSLY PRESENTED) The method of claim 58 wherein the saccharosamine is selected from the group consisting of glucosamine, galactosamine, fucosamine, and mannosamine.

61. (CANCELED)

62. (PREVIOUSLY PRESENTED) The method of claim 48 wherein L^1, L^2 are bound to A^1, A^2 and B^1, B^2 through an amide bond, an ester bond, an ether bond, or a thioether bond.

63. (PREVIOUSLY PRESENTED) The method of claim 48 wherein L^1, L^2 are bound to B^1, B^2 through an activated succinylated linker.

64-65. (CANCELED)

66. (PREVIOUSLY PRESENTED) The method of claim 48 wherein at least one of B^1, B^2 has an anionic functional group.

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67. (CANCELED)

68. (PREVIOUSLY PRESENTED) The method of claim 48 wherein B^1 is at least one of an oligosaccharide derived from the glycan family of carbohydrate including but not limited to hyaluronic acid, heparin, chondroitin sulfate, dermatan; a mono or disaccharide including but not limited to galactose, fucose, glucose, mannose, and hyaluronic acid; and B^2 is $-O(CH_2)_{1or2}CO_2^-$, $-O(CH_2)_{1or2}SO_3^-$, $-O(CH_2)_{1or2}SO_4^-$, or $-O(CH_2)_{1or2}PO_4^-$.

69-76. (CANCELED)

77. (PREVIOUSLY PRESENTED) The method of claim 48 wherein the anionic compound is selected from at least one of $-(CH_2)_d-CO_2^-$, $-(CH_2)_d-SO_3^-$, $-(CH_2)_d-OSO_3^-$, $-(CH_2)_d-PO_3^=$, $-(CH_2)_d-OPO_3^=$ where d=1-10, $-Ar-SO_3^-$, DTPA, EDTA, DOTA, or EGTA.

78. (PREVIOUSLY PRESENTED) The method of claim 48 wherein the monosaccharides and glycosides are selected from at least one of glucose, mannose, fucose, galactose, glucosamine, mannosamine, galactosamine, or sialic acid.

79. (PREVIOUSLY PRESENTED) The method of claim 48 wherein the C- or O-glucosides are selected from at least one of rutin, neohesperidin dihydrochalone, phloridizin, hesperidin, hesperidin methyl chalcone, naringenin, esculin, or carminic acid family.

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80. (PREVIOUSLY PRESENTED) The method of claim 48 wherein the carminic acid family is selected from at least one of carmine, 18b-glycyrrhetinic acid, or a salt thereof.

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